

media. The last is especially commendable on account of its high salt content. It is best to begin with small amounts and gradually increase until it is possible to add carbohydrate in one form or another.

Another good food for this condition is Finkelstein's Eiweiss milk. The curd of a quart of whole or liquid milk which has been coagulated with pepsin-rennet, etc., is thoroughly washed in cold water to remove all the whey and is then put through a hair sieve to break up the curds. This should be done at least twice. The curd is then mixed with a pint of buttermilk and a pint of boiled water. It is especially to be recommended because we have a mixture with the smallest possible percentages of sugar and fat—2.5% of fat and 1.5% milk sugar—the two elements to be avoided on account of danger of fermentation; the whey is diluted so that the tolerance for sugar is improved and the increased amount of proteid antagonizes the fermentation.

It is necessary to give the Eiweiss milk in small quantities at first and as soon as the stools are improved in quality, 3% sugar should be added, but in the form of malt sugar. Without this addition a gain is impossible.

#### REFERENCES.

1. Ernährungsstörungen der Säuglinge. H. Finkelstein and L. F. Meyer.
2. Leitfaden der Säuglingskrankheiten. Walter Birk.
3. Ernährungsstörungen und Ernährungstherapie. II. Theil. Czerny and Keller.
4. Malzsuppe: eine Nahrung für Magendarmkranke Säuglinge. Dr. Arthur Keller.
5. Lehrbuch der Säuglingskrankheiten Zweite Hälfte. Prof. Heinrich Finkelstein.

### A CASE OF COMPLETE DUPLICATION OF THE RENAL PELVIS AND URETER.\*

By ARTHUR B. CECIL, A. B., M. D., Los Angeles.

Cases of complete duplication of the renal pelvis and ureter are relatively infrequent. In 649 operations on the kidney and ureter reported by Braasch from the Mayo clinic seven cases of complete duplication of the pelvis and ureter were encountered. Gross congenital abnormalities in general, however, of the kidney and ureter are by no means uncommon and from the fact that these abnormal organs are so frequently the seat of disease, one should always be on guard for their detection in the study of diseases of the urinary tract. Perhaps in no class of surgical cases is a preoperative diagnosis of such vital importance.

The introduction of pyelography by Volcker and its extensive application by Braasch has made it possible to demonstrate, previous to operation, gross anatomical changes in congenital abnormalities. Geraghty, of Young's clinic, through the introduction of phenolsulphonephthalein as a functional test has added a method of inestimable value in that it is now possible, not only to demonstrate gross anatomical changes, but to determine the actual functional value of the renal parenchyma.

In the following case the anatomical abnormality was demonstrated by the injection of colloidal silver and the functional value of the right kidney and the two portions of the left by the use of phenolsulphonephthalein.

Case Report: Mrs. C. L. W., age 48, married, was referred to me for urological examination by Dr. W. M. Lewis, of Los Angeles, on August 12, 1914. She complained of being unable to urinate, of being feverish and worn out. Her father died at the age of 63 of heart trouble. Her mother died of tuberculosis. She had five brothers and they are all living and well.

Previous History: As a child she had measles, mumps and several attacks of tonsillitis. From childhood she has never been robust, but was never actually sick until she became pregnant in 1891. During the entire pregnancy she suffered greatly with nausea and general weakness. The weakness became so marked that for five weeks previous to the birth of her child she was confined to her bed. About one week prior to the birth her face and limbs became greatly swollen and pitted on pressure. Her physician told her that she had a form of Bright's disease. For three days previous to the birth she passed bloody urine and this continued at every urination until the child was born. At no time did she suffer pain or discomfort in either renal region. Immediately after the birth of the child her condition rapidly improved. The edema subsided and she felt well. In 18 months another child was born and during this pregnancy she was able to attend to her household duties until labor pains began. She did not suffer with edema during this pregnancy nor did the urine at any time contain blood. There was a perineal tear and a repair of the perineum was done in 1896. Following this pregnancy she suffered with a constant bearing down sensation



Cut No. 1. Collargol injection. Note normal outline of the right renal pelvis and ureter and duplication of left renal pelvis and ureter. The caudal portion of the left pelvis is hydronephrotic and most of the collargol has returned alongside of the catheter into the bladder. The arrow points to a small amount of collargol which has passed the obstruction and entered the hydronephrotic sac.

and for the relief of this the uterus was suspended in 1903.

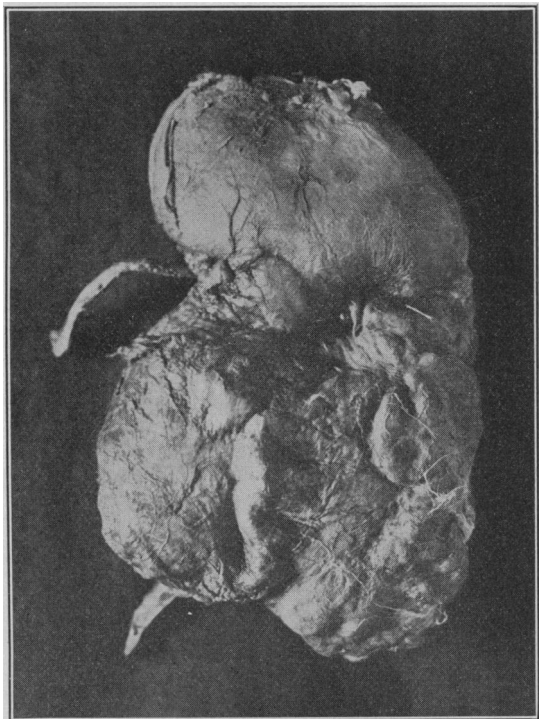
Menstruation began at 14. The flow was usually very slight and never lasted over three days. At the time of menstruation she suffered severe cramp-like pains in the lower abdomen. These pains caused her to be confined to her bed at each menstrual period. This condition was entirely re-

\* Read before the Los Angeles County Medical Society, October 1, 1914.

lieved by a dilatation and curettage in 1900. In 1908 her mentality became affected. At times she seemed in a comatose state, at others she had hallucinations. She was put in a sanitarium and in six months had entirely recovered.

Has never had renal colic; has never passed a stone.

Present Illness: Onset gradual. Three years ago noticed that she had to get up at night to urinate. At first she would urinate about twelve o'clock and again in the early morning. Urine passed easily and there was no burning. There was no increased frequency during the day. The urination at night became more frequent so that about two



Cut No. 2. Photograph of specimen removed. Hydronephrotic sac surmounted by well-formed renal mass. Note duplication of ureters.

years ago she would have to get up at night four or five times but during the day would not urinate more than three times. About this time (two years ago) she commenced to suffer with burning on urinating. At the same time she noticed some difficulty in starting the urinary stream. After straining for some time a half cupful would be passed. There was no dribbling. Hot cloths were used to relieve the pain which seemed to be at the neck of the bladder. In November 1913 she had complete retention and had to be catheterized. She was then able to void until August 9, 1914, when she again had complete retention and had to be catheterized. For several months previous to this she had felt extremely weak and run down. There was no actual pain, except the burning at the neck of the bladder and burning on urinating. On August 5, 1914, she was taken with chills and fever. She seemed to be smothering. Three days later she noticed for the first time a fullness in the left side. She told her physician that it felt as if she had a blown up paper bag in the left side. The next day she had to be catheterized and the urine was dark red in color. It was necessary to catheterize her then until she came to the hospital on August 12, 1914.

Examination: Poorly nourished woman, feverish and weak. Pupils equal, react to light and accommodation. Knee kicks about normal, station good. Lips dry, tongue coated, breath foul. In

the left abdomen is a mass which extends from beneath the costal border to below the iliac crest and to about four cms. mesial to the left mammary line. The mass is rounded and more prominent below than above. It is movable and fluctuates. With one hand in the left flank it can be pressed anteriorly. There is no marked tenderness over the mass. The abdomen shows no general rigidity. It is not generally distended.

Catheterized specimen of urine: very cloudy, acid reaction, no sugar. Centrifuged specimen shows enormous numbers of pus cells, few red blood cells, large numbers of motile bacilli. The supernatant fluid shows moderate cloud of albumin.

Cystoscopic Examination: Bladder capacity 560 c.c. The urethral orifice appears normal. The bladder wall is injected and edematous in the region of the trigone. The bladder is not trabeculated. No stone, no tumor, no diverticula. No ulceration anywhere.

The interureteric band is peculiar in that while the right side appears quite normal the band becomes broader and extends relatively further out on the left than on the right. The right ureteral orifice is oblong in shape. Its edges are not everted or edematous nor is there any injection or ulceration about its mouth. The urinary efflux is normal. On the left side is seen an ureteral orifice which occupies about the normal position. The edges of this orifice are edematous and injected. Urine can be seen squirting from this orifice. About one centimeter to the left and about 0.5 cm. above a small punctate opening is seen. This orifice is very small and in every way resembles the ureteral orifice after nephrectomy. Nothing is seen coming from this orifice. With ureteral catheter it was found that all three orifices permitted catheterization. The three ureters were catheterized and specimens collected for examination.

RIGHT		LEFT	
	Mesial orifice		Lateral orifice
Clear light yellow. Slight trace albumin. No pus, no red blood cells. No organisms, no casts, no crystals.	Clear light yellow. Slight trace albumin. Few pus cells, no red blood cells, no crystals, no casts, no organisms.	Very cloudy purulent material when pressure is made on the abdominal mass. Enormous numbers of pus cells, few red blood cells, many motile bacilli.	
Intravenous injection of 6 mms. phthalein.		phthalein.	
Appeared in 4 minutes.	Appeared in 4 minutes.	4	No phthalein in 34 minutes.
First 15 minute collection.			
30 C.C.	19 C.C.	3 C.C.	purulent material.
17.2% phthalein.	15.2% phthalein.	No phthalein.	No phthalein.
Second 15 minute collection.			
25 C.C.	12 C.C.	4 C.C.	purulent material.
10.5% phthalein.	6% phthalein.	No phthalein.	No phthalein.

Catheter passed into the bladder showed that there was no leakage.

An X-ray examination by Dr. W. B. Bowman was negative for stone. All three catheters were injected with colloidal silver by the gravity method and an X-ray taken. The right renal pelvis and ureter appear normal. The right kidney is in normal position. It was found that the mesial orifice on the left was the orifice of an ureter which led to the superior pelvis and the lateral ureteral opening was that of a ureter which led to the inferior pelvis. The lower pelvis being hydronephrotic, the upper pelvis was well formed. (See Fig. 1.)

The patient was operated on August 14, 1914, by Dr. W. M. Lewis and a large hydronephrotic sac surmounted by a rather well formed renal mass was removed. The pelves were found to be entirely separate. The ureters lay back of the renal mass. (See Cut 2.)

Huntington has pointed out that congenital abnormalities of the kidney and ureter present characteristics dependent upon arrest of or disturbances in the normal process of development.

Duplication of the renal pelvis and ureter, either partial or complete, has its explanation in an early division of the main renal bud. In the case of complete duplication the renal bud is double from its very inception from the Wolffian duct. The duplication is simply a disturbance of the normal development of the typical dichotomous renal pelvis.

In this case it was possible to determine, previous to operation, the value of the three portions of renal tissue and to point out the possibility had it been necessary of a bisection of the left kidney. The function of the right kidney in this particular instance, however, as determined by the use of phthalein was known to be practically normal and for this reason the problematical result of a bisection of the left kidney did not have to be considered.

#### REMEDIES FOR INDIGESTION MUST BE PROPERLY PREPARED AND SOLD WHILE FRESH.

Washington, D. C.—The Service and Regulatory Announcements of the Bureau of Chemistry, U. S. Department of Agriculture, state that examination of a number of products which purport to contain certain enzymes or ferments supposed to be useful in promoting digestion shows that these contain little, if any, of these active agents. Further investigation shows that the manufacturers frequently have employed a sufficient quantity of pepsin, diastase, pancreatin, trypsin, or similar material, but in many cases no attempt has been made to determine whether the material used is really active. In certain cases, manufacturers have combined pepsin and trypsin which tend to negative each other, and in other cases they have used its pepsin in alkaline media, which destroy activity, and have combined trypsin with acid substances which are not suited to it. Under certain methods of preparing the remedies, heat is applied to a degree that may destroy the activity of the pepsin or other enzymes. Similarly, many of these substances which owe their properties to the action of enzymes, are put up in too strong alcoholic solutions or in other ways which lessen their effectiveness.

The great trouble with many of these preparations, however, is that they do not keep well, and while active at first, after a time lose their digestive activity. The Department of Agriculture therefore warns manufacturers that preparations claiming to contain digestive enzymes should be put up in such a way that they will have suffered little, if any, loss of activity when sold to the consumer.

In the case of preparations which are liable to deterioration within a few months, the Department suggests that each lot should be dated, and that sales after a certain fixed time should be prevented.

#### IN ERRATA.

Dr. A. I. Zobel's paper on "Early Diagnosis of Cancer of the Rectum," appearing on page 376, was omitted from the general contents in the December issue 1914.

Also Dr. H. E. Ruggles' paper, which appears on page 284, "Six-Hour Stasis," was omitted.

### SOCIETY REPORT

#### BUTTE COUNTY.

Butte County Medical Society held its monthly meeting at the offices of Dr. M. P. Stansbury,

Tuesday evening, November 17, with the following members present. Drs. E. E. Baumeister, President P. L. Hamilton, C. C. Landis, O. Stansbury, M. P. Stansbury and Ella F. Gatchell.

Dr. M. P. Stansbury presented the subject of "Diagnostic Errors" in a very interesting and novel manner.

ELLA F. GATCHELL, Sec'y.

#### SACRAMENTO COUNTY.

The regular November meeting of the Society was held on Saturday evening, November 21st, 1914, at the Hotel Sacramento, at 8:30 o'clock, and was a joint meeting with The Sacramento Valley District Dental Society.

##### Subjects:

1. "Dental Conditions as Related to the Development and Diseases of Children." By W. P. Lucas, M. D., Professor of Pediatrics, University of California.

2. "The Relations of Medicine to Dentistry." By J. G. Sharp, M. D., D. D. S.; Professor of Surgery, University of California, Dental Department.

3. "Syphilis of the Mouth" (lantern slide demonstration). By Howard Morrow, M. D., Professor of Dermatology, University of California.

All members of the Profession visiting in Sacramento were cordially invited to attend.

F. F. GUNDRUM, M. D., Secretary.

#### PROCEEDINGS OF THE SAN FRANCISCO COUNTY MEDICAL SOCIETY.

During the month of November, 1914, the following meetings were held:

##### Medical Section, Tuesday, November 3d.

1. Notes on Angina Pectoris. W. W. Kerr. Discussed by H. D'A. Power.

2. The Use of Perfusion Mixtures in High and in Low Blood Pressures. J. J. Hogan. Discussed by G. M. Barrett and H. D'A. Power.

##### General Meeting, Tuesday, November 10th.

1. Dermatitis Caused by Primula Poisoning. D. W. Montgomery and G. D. Culver. Discussed by Emmet Rixford.

2. Hernia in Relation to Accident Insurance. Emmet Rixford. Discussed by J. A. Haderle, S. O. Beasley, L. Eloesser and F. D. Tait.

3. The Orthopedic Treatment of Fractures. J. T. Watkins. Discussed by Emmet Rixford and C. E. Farnum.

##### Surgical Section, Tuesday, November 17th.

1. Report of Case of Fracture of the Carpal Cuneiform.

2. Gastrointestinal Diagnosis. Illustrated by 40 Consecutive Operative Cases (April-October, 1914). C. W. Lippman. Discussed by W. C. Alvarez.

3. Personal Results with Anoci Association. W. I. Terry. Discussed by F. D. Tait, F. Williams, H. A. L. Ryfkogel, S. Hyman and A. Newman.

4. Morphin-Scopolamin Anesthesia in Obstetrics. L. I. Breitstein. Discussed by W. F. B. Wakefield, B. F. Sandow, W. E. Libby and A. Newman.

##### Eye, Ear, Nose and Throat Section.

##### Tuesday, November 24th.

##### 1. Presentation of Cases:

(a) Meniere's Symptom Complex, begin-